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STRIGA ASIATICA AND CHRYSOMA PAUCIFLOSCULOSA IN THE CAROLINAS

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Striga asiatica (L.) Kuntze, Witchweed, (Scrophulariaceae), is parasitic on the roots of corn, sorghum, sugar cane, and other grasses. It has long been a serious pest in tropical and subtropical areas of the Old World.

Garriss and Wells (Plant Disease Reporter 40(10):837-839. 1956) reported the occurrence of a species of Striga in Robeson County, southeastern North Carolina. Subsequently identified by Dr. S. F. Blake as S. asiatica, this was the first record of the species in the Western Hemisphere. Since this report intensive research was initiated by the Department of Agriculture and by agriculturalists and plant pathologists in North Carolina and South Carolina to find means of eradicating this pernicious weed. Studies of effects of soil types and soil temperatures on growth were made (Nelson, Plant Disease Reporter 42(1): 152-155. 1958). The same author (loc. cit. 42(3):376-382. 1958) stated that 45 species of cultivated and wild grasses may serve as hosts for Striga. General information, much of which came from earlier studies by South African researchers, was summarized by Nelson (loc. cit. 41(5):377-383. 1957), and in U. S. Department of Agriculture, Agricultural Research Service, Special Report 22-41, 17 pages, June 1957. The latter publication included drawings of Striga. Seeds of Witchweed may remain viable in the soil for twenty years; a single plant may produce 50,000 to 500,000 seeds, each about 0.2 mm. in length. Obviously, such seeds are readily disseminated by wind, and once present in the soil constitute a long-lasting source of new plants.